

Proceedings at the Hall.

On the afternoon of November 21, 1889, at 4 o'clock, HON. FREDERICK FRALEY, LL.D., THE PRESIDENT of the Society, delivered the following address at the Hall of the Society :

Associates and Friends :

It gives me great pleasure to welcome you to this ancient edifice, which has been the home of the American Philosophical Society for one hundred years. It stands on a portion of the old State House Square, in Philadelphia, about which and the buildings standing upon it cluster so many precious historic and patriotic memories. The site for it was granted by the Commonwealth of Pennsylvania in the year 1785, after a persistent struggle on the part of the Society to obtain a spot upon which to locate its dwelling-place, and it is a source of high gratification to all those who have succeeded in the membership of the Society that such a place was selected for its home. It stands in close proximity to the other monumental buildings upon the square, is not distinguished by any architectural pretensions, but is a simple, home-like building, frequently mistaken as a part of the municipal buildings which surround it. As the passers in the streets go to and fro they identify it with the city buildings and have no consciousness that it is the ancient home of a great scientific institution.

The members of that day had considerable trouble, of course, in raising the necessary funds for the erection of such a building. It was one of quite large proportions then, and it occupied some thought so to

adjust the apartments to the expected purposes of the institution as to have space, convenience and harmony of arrangements. But when the members of the Society and visitors from abroad enter its portals to ascend to these rooms, memories of the past naturally arise in their hearts, and they feel that they are surrounded by a different atmosphere from that which prevails below. Their thoughts are exalted to the purposes of such an institution, and after looking over its treasures and appreciating what so many years have gathered together they are prepared to go, reinforced by its associations, and hopeful that such an institution may continue for many years to come.

The property was granted in perpetuity by the Commonwealth, with permission to rent such parts of the building as were not needed for its immediate use, and from the time it was erected to the present hour considerable portions of it have been under rental, largely contributing to the income of the Society and enabling it to work out its career of usefulness. It has been attempted, upon several occasions, to dispose of our interests in the site and building, but we are limited in these respects to a sale to the city of Philadelphia, to the county of Philadelphia, to the State of Pennsylvania, and to the United States, for courts of justice or purposes cognate thereto. Thus it has happened that upon two occasions arrangements have been made to sell it to the city of Philadelphia and once to sell it to the United States, but happily, perhaps, for the institution, those sales were not consummated, and we still remain in our ancient dwelling-place. Yet when our Committee on Hall moved the Society to hold this celebration, it seems to me that they meant to admon-

ish us of the fact that the time was rapidly approaching when we must dispose of our property here.

In the year 1870 the Legislature created a Building Commission for the purpose of erecting a City Hall on Penn Square, and they connected with that enactment a provision that when those buildings were completed the Building Commission should remove from this beloved square all the buildings standing upon it except the venerable State House, Independence Hall, supposing that would be a sufficient monument to perpetuate all the patriotic thoughts clustering about the city of Philadelphia.

I feel embarrassed when I have to talk of our parting with our ancient home. It is associated in my mind with so much pleasure, with so much instruction, that perhaps I ought to hope that I may not live to see the Society part with it. But there are considerations connected with this subject which I think ought to weigh with the members of the Society, when they consider the vast amount of precious treasures that we have accumulated here in the shape of our library, our collections, our manuscripts, our portraits, and so many things of which all feel pride in the possession. We have a building fund slowly accumulating, which, in time, independently of the sale of this property, might provide for the erection of a fire-proof building, and we ought, perhaps, to look a little beyond our own immediate wants and ascertain, when the time of removal comes, whether there are not kindred associations in the city of Philadelphia with which we could unite in erecting a temple to useful knowledge, to the fine arts, to the mechanic arts, and to all those arts which contribute to the happiness and welfare of mankind.

It may be appropriate in the progress of this address to make a brief reference to the history of the Society itself. When Benjamin Franklin came to the city of Philadelphia about the year 1727, he formed that celebrated Junto which he has so admirably described in his autobiography, an association of his friends pledged to each other for mutual improvement, for the study of the philosophy and science of that day, and for disseminating their ideas by discussions and essays that might appear in the public prints.

It appears that for the forty years this Junto was in existence, it was always in the thoughts of that eminent and patriotic man, so urgent in the performance of his duties, so apt to every exigency, that even after it had existed for forty years he wrote to his friends in Philadelphia, calling their attention to the fact that the Junto still existed, and urging upon them the propriety of keeping up its meetings and further developing its usefulness and prosperity. In 1743, on the 25th of May—new style—Benjamin Franklin published a prospectus for the establishment of an American Philosophical Society. In that prospectus he described with minute precision the objects that such a society should have, the methods to prosecute them, the means by which it might obtain success, and the organization which seemed to him to be necessary to bring about perfection to such an institution. With keen foresight he saw that the chief labor of such a society and such an organization would devolve upon the active mind which had originated it, and with the simplicity and adaptation of his great character he proposed himself for the humble office of secretary in the society, and for many years acted in that capacity ;

and the minutes in his handwriting are to a great extent now in our possession. But 1743 was quite too early for an institution having such vast objects in view, expecting so much to be done by its members, and hoping to associate with them distinguished men from abroad to contribute to its proceedings and records. So the society had a sort of intermittent existence for many years, and in 1750 a new Junto made its appearance, established upon the same principles as the ancient Junto of Franklin, composed of many of his friends, and for awhile it seems to have been mistaken for the old Junto itself. But the examination of the records of our Society and of the traditions by Dr. R. M. Patterson, collected in 1843, when the Society celebrated the Centennial of its organization, seem to afford conclusive proof that it was a new Junto, copied from the old one, endeavoring to carry out the same objects and in the same way, and with the same number of members, the same traditions and everything that seemed to equip it for usefulness in such a crude form.

It went on, and in the year 1758, as far as I have been able to determine, it, too, formed a society for the promotion of useful knowledge. It embraced in its membership many of the distinguished men of the city of Philadelphia. It had for its president the Hon. James Hamilton, who was governor of the province of Pennsylvania, and with quite a worthy band of associates seemed, so far as the simplicity of those times could go with the need of educated minds to prosecute scientific research, to be accomplishing quite a useful purpose. But it was soon found that there was no room for two such societies, and gradu-

ally the authorities of each, in friendly conference, tried to bring them together, and after some diplomacy, and some difficulties about the status that the members of each should occupy in a new organization, the union was happily effected, in the month of December, 1768, and on the 2d of January, 1769, Benjamin Franklin, the honored scientist, the great statesman, the man of affairs, was elected President of the Society, and the subordinate officers were about equally divided among the members of the two institutions.

The new society took the title of "The American Philosophical Society, held at Philadelphia for Promoting Useful Knowledge," and such has been its honored and honorable designation from that time to the present hour.

I have thus briefly sketched the history of the building in which we are now assembled, and, as briefly, the history of the Society itself, and perhaps I ought to terminate my address at this point, but I cannot forbear to call the attention of my brother members to the illustrious list of members elected from 1769 up to the present day, the labors of the Society in promoting useful knowledge, the correspondence that it has held with foreign bodies of the same sort, the accumulation of the treasures which surround us here to-day, and all that seems to clothe such an association with a most honorable record and with the means for continued usefulness.

I may say, in passing, that I have known this hall for seventy-five years; that I recollect it when it was in part occupied by Charles Wilson Peale, the founder of the Philadelphia Museum, in which, while it con-

tinued in existence, so many people derived both amusement and instruction in natural history. I recollect when the cages which contained the animals that composed the modest menagerie which he possessed were located along the wall on Fifth street; and in my boyhood I used to go to look at what were then the wonders of natural history to me; and then, straying with my parents or friends into the old Museum which was then in Independence Hall, trying to gather amusement and instruction from the good collection that he had established there.

The Transactions and Proceedings of the Society contain the eulogies and other biographical notices of the members that have passed away, and I must refer my associates and friends to those Proceedings in order that they may read in those eulogies and biographies the character and works of the men who were members of this Society, and who ornamented and instructed the world by their labors in the various departments of useful knowledge, of applied science, of intellectual research—in all, indeed, that contributes to make the perfect man and to illustrate through him the great works of the Creator, and which enable men to penetrate into those secrets that are buried in the earth, exist in the air and in the waters, and which are so full, not only of instruction but admonition, too, to the thoughtful heart, to realize what is in the world and what the world seems to have been made for.

My intimate acquaintance and personal friendship with the prominent members of this Society resident in Pennsylvania began about the year 1825, when the Franklin Institute of Philadelphia was founded—a great institution intended for the promotion of the

mechanic arts. In its formation the active members of the Philosophical Society participated, two or three were counted among the founders of that institution, and many among its original members.

I have always considered it fortunate that I had such an introduction to the members of this Society. In the year 1842 I was honored with election to its membership, and for forty-seven years I have attended its meetings with reasonable regularity, listening to the papers and essays that have been read here, and the discussions which have come up from time to time upon them, forming the most pleasant and friendly association with the old members, and participating with them in the traditionary usages of the Society. After the serious business of the hour was over, the members gathered in a quiet circle around that ancient fireplace, and there, from grave to gay, from lively to severe, the conversation went on, science and humor and glee moving around the circle, cheering every heart; and when the old clock struck ten, the members, bidding each other a hearty good-night, separated with the hope that the next Friday evening would bring them together again for participation in renewed joy.

If I have had any useful career in life I owe much of it to what I have learned in the Franklin Institute and in the American Philosophical Society. And I avail myself of this occasion to say to my fellow-members that if I have a great object at heart at the present time it is that the American Philosophical Society shall rouse itself up with energy to the work that is demanded of it at the present time, and use the means and the influence that it has and the power that it ought to exercise in the community for promoting

everything that is connected with usefulness to man, everything that will tend to improve his moral and intellectual character, and everything that will enable him to rise with higher appreciation of what is good, drawing him nearer and nearer to the Great Creator.

I am almost afraid to trust myself to mention names in connection with this address, but considering that Benjamin Franklin and the worthies of those early days, that George Washington and Thomas Jefferson, and Robert Morris, and Alexander Hamilton, and Thomas Willing, and David Rittenhouse, were members of this Society before the close of the eighteenth century, and that since then the Society has been adorned by such men as Caspar Wistar, Robert Patterson, William Tilghman, Peter S. Duponceau, Nathaniel Chapman, Robert M. Patterson, Franklin Bache, Alexander Dallas Bache, John K. Kane, George B. Wood, and that other names of the illustrious roll such as Joseph Henry, Robert Hare, Henry D. Rogers, J. Peter Lesley and Asa Gray have been members during the present century, I think that I can point my fellow-members to a roll which they may study with great profit, realizing from it the instruction, the comfort, the happiness, I may say, in that such men have lived and have contributed so largely to the instruction of the world.

Here philanthropy has also had its home. Many of the great and useful institutions of the city of Philadelphia have been thought of, formulated and brought into existence within these walls. The Pennsylvania Institution for the Instruction of the Deaf and Dumb, the Pennsylvania Institution for the Instruction of the Blind, the House of Refuge, the Apprentices' Library,

the Academy of Natural Sciences, the Historical Society of Pennsylvania—oh, my friends and associates, my mind is full of these precious associations, and I have not time to give them full utterance. But pointing you to the records of the Society, I ask you to have the same interest in them that has given me so much enjoyment, and if in this hour I can awaken you to more affection for the old Society than you now have, and bring you to think of it in the same favorable light in which I do, I will have accomplished a part of my work as your President.

Our industrious Secretary, Mr. Henry Phillips, Jr., has prepared two pamphlets, being registers of the subjects of the essays that are to be found in the Transactions and Proceedings of the Society. You will wonder when you look over them at the diversity of objects which have been under the care of the Society, that have occupied its attention, that have stimulated its members in their various paths of life, and which have enabled them to throw additional light upon the concerns of the world, and to open up the treasures of science to those to whom they had not previously been given.

It is fortunate for us that the Society recovered from the great difficulties of a pecuniary character under which it labored in the year 1837, and has been able to accumulate a handsome permanent fund, which, with its rentals, enables it to publish in an attractive form all the valuable essays and contributions of the members, not only of its resident members, but of those cherished associates who reside abroad and are prosecuting their labors in the various fields of human knowledge. It will be criminal, indeed, for us to hold

the purse-strings with a niggard hand when contributions come to us for publication that have the merit of novelty in original research, of usefulness in discovery, because of the inability, often, among students to possess the pecuniary means to give them publication themselves. Here such a society as ours stands between the student who toils over the midnight lamp or penetrates the caverns of the earth, or looks into the heavens for new planets and new stars—here, then, I say, the members of our Society ought, with a liberal hand, to supply all such explorers in the fields of nature and all such laborers in the fields of knowledge with the means for giving publicity to their works and enabling them to spread abroad great scientific truths.

In closing this address, I will refer my associates and the friends that we have here with us to-day to the last edition of the charter and laws of the Society; and the same industrious Secretary to whom I have referred has placed upon the pages of that book, in the order of their election, the various Presidents of the Society, its Vice-Presidents, its Treasurers, its Secretaries, its Curators, and the members of its Council. An examination of this list shows, I think, the great sagacity of the founders of the Society in this respect: while, selecting from the members those who were thought worthy to be office bearers, they gradually placed each man in the position of apprenticeship, educating him in the work of the Society as he was found useful, promoting him to what was the higher order of the office holder, and thus bringing about an *esprit du corps* among the members of the Society which I think has largely contributed to its usefulness. Thus, we find that before the illustrious Jefferson was elected Presi-

dent, he served as a Vice-President of the Society, and during his residence in Philadelphia often attended its meetings, and when absent in Virginia, having the Society at heart, contributing original publications and even sending to it geological and other specimens, and discussing what some of us even now think are the mysteries of meteorology. So it was with every President of the Society (but one, and he its most liberal benefactor), that this process of education and assimilation as officers went on from the year 1769 and is now continued.

It may be appropriate in a slight historical sketch like this to say that the election of members is made in secrecy and confidence. The theory is that no man has the least idea that he is to be elected a member. He is proposed by two or more members, in writing, the nomination setting forth briefly the claims that he has to membership in the Society, and four times a year a balloting takes place, equally confidential and secret, requiring three-fourths of the votes cast to constitute an election. If a candidate be unsuccessful, the nomination papers and all the ballots containing his name are destroyed, and he is supposed never to know that he has been a candidate. And so, in this connection, and in view of this secret and confidential introduction to membership in the Society, I would urge my fellow-members, both resident and non-resident, to look about them with open eyes and with studious thought for men deemed fitting to be associated as members of this honorable institution. When they find, of their own knowledge or by inquiry, a worthy name to present for membership, to indicate in the same confidential way to their associates the

claims of such a man, and finally to bring him into the fold, where we may hope to have the benefit of his knowledge, the influence of his worth, the lustre which his character may throw upon the institution, and that his name may be placed on this Golden Roll, which began in 1743, and, coming down to the present day, contains a record of all those who have been elected to our membership.

If I find that it is not too voluminous, I propose to make it an addendum to this address which I have had the honor to deliver before you, so that it may point the way to the future as it will indicate the history of the past, and that this honorable Society of ours may go on, from century to century, by perpetual existence under that charter which it obtained from the State of Pennsylvania in the year 1780, so comprehensive in its character, so full of wisdom as to the purposes of such a society, securing for its members freedom of transmission of their correspondence and Proceedings even in times of war, and indicating that the men of those early days had those high purposes at heart which we of the present century are too apt to think are our peculiar inheritance.

What the discoveries of the past century have been ; how much they have contributed to the welfare and prosperity of the world ; how rapid and infinite the progress of discovery seems now to be ; such thoughts almost overwhelm the mind that attempts to contemplate them and to wonder what is to come next. When Benjamin Franklin drew the lightning from the heavens by his kite, when he carried the wire across the Schuylkill river and showed that communication with such a distance could be had by electricity, who ever

thought that Henry, Morse and other scientists would develop the grand idea, the spark of which was thus struck out by Franklin, into the electric telegraph, into electric lighting, into electric motion over a railway? Well, I cannot venture to enumerate what are to be the exhibits of electrical phenomena. And, when we find that the human voice can penetrate space to immense distances; that speech in such a room as this can be transmitted to a cylinder, recording every word and the tone of every word that is spoken, and that then—how long a time afterwards has not yet, I believe, been determined—that same cylinder can be unrolled and the words can be again uttered, and the speech, whether it be one of wisdom or of folly, be repeated to the world for good or for evil, as the case may be, what is the unfolding of the ancient papyri to such a wonderful discovery as this?

How, my associates, can we bring ourselves to realize what has been accomplished during our own lifetime in these respects? And yet the men of science are fearlessly looking forward, making, day by day, new discoveries in archæology, geology, palæontology, in chemistry, mechanics, and physics, with their great variety of applications.

And we, who are approaching the evening of life, and realize what we have enjoyed in so many discoveries and so much usefulness, cannot hope that we shall be permitted to see all the glorious developments that yet remain to be produced by the operation of the human mind, by the application of the principles which lie at the foundation of applied science. But when the time comes for our departure hence, I trust that we may all realize that we have been permitted to live in

an age characterized beyond all others by the useful applications of knowledge, and to be proud that such institutions as this have contributed to their promotion, have added to the intellectual wealth of society, and are prepared to go on for all time somewhat beyond the beaten pathway, but still tending higher and higher, under the wisdom of the Creator, who endows His human creatures with those faculties which enable them to look into His works and to be influenced by His word and spirit.

Proceedings at the Dinner.

The dinner was given at the HOTEL STRATFORD, S. W. corner of Broad and Walnut streets, Philadelphia, at 6 o'clock P.M., of the same day.

There were present the following gentlemen :

Richard L. Ashhurst,
 William S. Baker,
 Wharton Barker,
 Daniel G. Brinton,
 Arthur Biddle,
 Martin H. Boyè,
 William G. A. Bonwill,
 John R. Baker,
 Andrew A. Blair,
 George W. Childs,
 Robert Cornelius,
 William C. Cattell,
 Thomas H. Dudley,
 Frederick Fraley,
 Joseph C. Fraley,

William W. Griscom,
 Traill Green,
 Henry D. Gregory,
 Inman Horner,
 Edwin J. Houston,
 Henry Hartshorne,
 Joseph S. Harris,
 Henry Hazlehurst,
 William W. Jefferis,
 George DeBenneville Keim,
 William W. Keen,
 William V. Keating,
 John J. Keane,
 M. H. Messchert,
 James W. Moore,